

**CLAIMS**

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

- 1       1. A virtual Point-of-Sale (POS) system for a retail store comprising:  
2               a remote activator device carried by a sales associate;  
3               a positioning system which recognizes a signal from the remote  
4 activator device and determines where and how to find an appropriate blank  
5 surface near the sales associate's actual location;  
6               an integrated projector and camera assembly responsive to the  
7 positioning system and which rotates to a correct position and displays a POS  
8 application on a blank surface near the location of the sales associate, the  
9 camera detecting entries in the POS application by the sales associate as  
10 interactions with the displayed POS application;  
11              a scanner used by the sales associate for scanning merchandise codes  
12 to enter purchases in the displayed POS application; and  
13              a magnetic stripe reader for reading a credit or debit card to complete  
14 transaction in the displayed POS application.
- 1       2. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,  
2 wherein said remote activator device, said scanner and said magnetic stripe  
3 reader are each part of an integrated device carried by the sales associate.
- 1       3. The virtual Point-of-Sale (POS) system for a retail store recited in claim 2,  
2 wherein in the integrated device further includes a printer for printing a sales  
3 receipt.

1       4. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,  
2       wherein the signal from the remote activator is a wireless signal conforming to  
3       a standardized protocol.

1       5. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,  
2       wherein the positioning system uses a positioning algorithm to determine  
3       where and how to find a blank surface near the sales associate's actual  
4       location.

1       6. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,  
2       wherein the remote activator device transmits location information to the  
3       positioning system for use in determining where and how to find a blank  
4       surface near the sales associate's actual location.

1       7. The virtual Point-of-Sale (POS) system for a retail store recited in claim 1,  
2       further comprising a back office computer connected to receive entries in the  
3       POS application.

1       8. A method of operating a virtual Point-of-Sale (POS) system for a retail  
2       store comprising the steps of:  
3             transmitting an activation signal to a positioning device;  
4             in response to the activation signal, determining by the positioning  
5       device a source location of the activation signal;  
6             moving by the positioning device a projector to project a virtual POS  
7       display on a surface proximate to the source location; and  
8             detecting entries for a transaction using the virtual POS display.

1       9. The method of operating a virtual Point-of-Sale (POS) system for a retail

2 store recited in claim 8, further comprising the steps of:  
3 determining if payment is made by credit or debit card; and  
4 if payment is made by credit or debit card, finalizing the transaction.

1 10. The method of operating a virtual Point-of-Sale (POS) system for a retail  
2 store recited in claim 9, wherein if a payment is not made by credit or debit  
3 card, further comprising the step of suspending the transaction for finalizing at  
4 a check out desk.